

RUBANOV, V.S.

How magnesium fertilizers affect plants on turf-Podzolic
sandy-loam soils. Pochvovedenie no.6:39-46 Je '61.
(MIRA 14:6)

1. Akademiya sel'skokhozyaystvennykh nauk BSSR.
(Plants, Effect of magnesium on)
(Minerals in soil)

IL'ICH, G.K.; RUBANOV, V.S.

Spectroscopic method of investigating complex formation. Dokl.
AN BSSR 6 no.3:159-163 Mr '62. (MIRA 15:3)

1. Institut fiziki AN BSSR. Predstavleno akademikom AN BSSR
B.I.Stepanovym.
(Molecular spectra) (Complex compounds)

1.11.0
S/051762/013/003/012/012
EO32/E514

9,8576 (4205)

AUTHOR: Rubanov, V.S.

TITLE: On the migration and transfer of energy in a two-component mixture

PERIODICAL: Optika i spektroskopiya, v.13, no.3, 1962, 454-457

TEXT: The author is concerned with a linear model in which the amount of one of the substances, e.g. an impurity, is small compared with the amount of the other substance. Excitations due to the absorption of a quantum of radiation by the main substance are assumed to be localized at each instant of time in a particular molecule. In the migration process in the main substance, the excitation energy is either transformed into other forms or is transmitted to an impurity molecule. It is shown that if the probability $w(x, t)$ of detection of the excitation energy in the range $x, x+dx$ at time t is described by the diffusion equation

$$\frac{\partial w}{\partial t} = M \frac{\partial^2 w}{\partial x^2} - (f + d) w; \quad (1)$$

$$w(x, 0) = \delta(x - \ell), \quad (2)$$

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On the migration and transfer of ... S/051/62/013/003/012/012
E032/E514

then the total probability for the transmission of the excitation energy to the impurity molecules in a linear chain is given by

$$P = \sum_{k=1}^{\infty} \frac{8}{MC^2 + (2k-1)^2 \pi^2} \quad (13)$$

where f and d are the probabilities of transition of an excited molecule of the main substance into a non-excited state with and without the emission of radiation, respectively, M is a diffusion coefficient describing the energy migration and C is the linear concentration of the impurity molecules. In deriving this equation it is assumed that the absorption of a quantum at different points on the linear chain is equally probable. Since P and C can often be determined experimentally, this formula may be useful in the interpretation of experimental results and, in particular, the determination of the diffusion coefficient M which describes the migration process if the excited state lifetime for the main substance is known. This work was directed by B. I. Stepanov. There is 1 figure.

SUBMITTED: March 6, 1962
Card 2/2

SHEMPEL', V.I., akademik, red.; MUKHIN, N.D., kand. sel'khoz. nauk, red.; RUBANOV, V.S., kand. sel'khoz. nauk, red.; LAZARCHIK, K., red.; TIMOSHCHUK, R., tekhn. red.

[For increased yields of groat crops] Za povyshenie urozhai-
nosti krupianyykh kul'tur. Minsk, Sel'khozgiz BSSR, 1963. 78 p.
(MIRA 16:5)

1. Minsk. Nauchno-issledovatel'skiy institut zemledeliya.
2. Akademiya nauk Belorusskoy SSR (for Shempel').
(White Russia--Buckwheat) (White Russia--Millet)

L 10153-63 BDS
ACCESSION NR: AP3000325

S/0048/63/027/005/0700/0702

AUTHOR: Rubanov, V. S.

48
47

TITLE: Concerning energy migration and transfer in two-component mixtures
[Report, Eleventh Conference on Luminescence held at Minsk 10-15 Sept. 1962]

SOURCE: Izvestiya AN SSSR. Seriya fizicheskaya, v. 27, no. 5, 1963, 700-702

TOPIC TAGS: energy migration, energy transfer, scintillators

ABSTRACT: The present study is an extension of previous investigations by the author (Optika i spektr., 13, 454, 1962 and Trudy* Konferentsii molody*kh ucheny*kh AN BSSR, Izv. AN BSSR, Minsk 1962) of energy migration and transfer in two-component solutions of the scintillator type. The one-dimensional model is considered. The problem is reduced to solving the diffusion equation for a "segment" consisting of a large number of host molecules with impurity molecules at the ends. The earlier equation for the efficiency of energy transfer to the impurity particles is adduced; this was derived for the case when the probability of transfer from host to an impurity molecule is much greater than

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ACCESSION NR: APP3000325

the probability for host to host transfer. In the present paper there is deduced an expression for the transfer efficiency with the probability relation restriction removed. The transfer efficiency is a complex function of the lifetime of the host molecules in the excited state, a coefficient characterizing the migration intensity, and the impurity concentration. "The author is grateful to B. I. Stepanov for guidance." Orig. art. has 11 equations and 1 figure.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: PH

NR REF SOV: 002

OTHER: 000

Card 2/2

ACCESSION NR: APL020380

8/0250/64/008/002/0090/0093

AUTHORS: Stepanov, B. I.; Rubanov, V. S.

TITLE: A method for determining absolute concentration of excited catalyst particles in a scintillation mixture

SOURCE: AN BSSR. Doklady*, v. 8, no. 2, 1964, 90-93

TOPIC TAGS: scintillation mixture, transmission probability, catalyst ion, excited state, solute absorption, optical excitation

ABSTRACT: For two-component liquid scintillation mixtures excited by a light source in the solute absorption band, the kinetic equation becomes

$$\begin{aligned} Bun_1 - \left(\frac{1}{\tau} + \alpha n_1 \right) n_2 &= 0, \\ \alpha n_2 n_1 - \frac{1}{\tau} n_2 &= 0, \end{aligned}$$

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ACCESSION NR: AP4020380

where α - proportionality coefficient between energy transmission probability and concentration of unexcited catalyst ions, U - density of exciting radiation, n_1 , n_2 , n_1' , n_2' - number of excited and unexcited solvent particles and catalyst particles respectively, τ and τ' - lifetime of excited state in pure solvent and activator, respectively. Assuming small perturbations $n_1 = n$, $n_1' = n'$, the solution of the above equations leads to the luminescence intensity

$$I = A'n_2'h\nu' = A'nBu_h\nu'\tau' \frac{\alpha n^2}{\frac{1}{\tau} + \alpha n'}$$

This expression permits the determination of the magnitude of $\alpha\tau$ of the mixture if $I(n')$ and $\tau'(n')$ are known. An exact solution of the kinetic equations is also given for particle conservation condition

$$n_1 + n_2 = n, \quad n_1' + n_2' = n'$$

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ACCESSION NR: AP4020380

It is shown that these results can be applied to the case of optical excitations in scintillation mixtures. Orig. art. has: 18 formulas and 2 figures.

ASSOCIATION: Institut fiziki AN BSSR (Institute of Physics AN BSSR)

SUBMITTED: 09Dec63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: QP

NO REF SOV: 001

OTHER: 002

Card 3/3

APANASEVICH, P.A.; BORISEVICH, N.A. VOI OD'KO, L.V.; GLADCHENKO, L.F.;
GRIBKOVSKIY, V.P.; GURINOVICH, G.P.; IVANOV, A.P.; KUZNETSOVA,
V.V.; PIKULIK, L.G.; FILIPOVICH, V.A.; RUBANOV, A.S.; RUBANOV,
V.S.; SAMSON, A.M.; SARZHEVSKIY, A.M.; SOLOV'YEV, K.N.;
UMREYKO, D.S.; KHAPALYUK, A.P.; YEL'YASHEVICH, M.A., akademik,
red.

[Interaction between nonequilibrium radiation and matter]
Vzaimodeistvie neravnovesnogo izlucheniia s veshchestvom.
Minsk, Nauka i tekhnika, 1965. 223 p. (MIRA 18:3)

1. Akademiya nauk SSSR. Institut fiz. Akademiya nauk Belorusskoy SSR (for Yel'yashevich).

GORSHESHNIKOV, V.S., dots.; RUBANOVA, A., red.; BELYKH, I., tekhn. red.

[Biochemistry and the principles of organic and physical chemistry; manual for students of correspondence departments of the institutes of physical education] Biokhimiia s osnovami organicheskoi i fizicheskoi khimii; metodicheskoe posobie dlia studentov otdelenii zaocnogo obucheniia institutov fizicheskoi kul'tury. Moskva, Izd-vo "Fizkul'tura i sport," 1963. 136 p. (MIRA 17:3)

1. Soyuz sportivnykh obshchestv i organizatsii SSSR. Tsentral'nyy Sovet. 2. Gosudarstvennyy tsentral'nyy institut fizicheskoy kul'tury (for Gorsheshnikov).

CA

Pathology 11-6

Acid-base relations in blood serum in patients with lung emphysema at various levels of respiratory deficiency. L. M. Georgievskaya, E. A. Babanova, R. A. Berezhnova-Solov'eva, Ya. V. Blagushkonnaya, and M. V. Zhukov (1st Leningrad Med. Inst.). *Tsypov. Arkh.* 24, No. 4, 23-31(1952).—With an increase of respiratory deficiency the CO₂ and org.-acid content in blood serum rises, as does that of Na and to some extent K. Cl is lowered correspondingly, and the tendency to develop gas and nongas acidosis is incompletely compensated by retention of Na in the blood. Generally there is an accumulation of acids and bases in blood plasma. The compensation is decreased even more in cases with heart deficiencies.

G. M. Kusolapoff

RUBANOVA, F.G.; PODOBED, Yu.I.; SENCHUK, T.T.

Diagnosis of tularemia. Zdrav.Belor. 5 no.6:9 Je '59.
(MIRA 12:9)

1. Iz Belorusskogo instituta epidemiologii, mikrobiologii i
gigiyeny i kafedry kozhno-venericheskikh bolezney Minskogo
meditsinskogo instituta.

(TULAREMIA)

VOTYAKOV, V.I.; GRITSKEVICH, A.V.; KORZENKO, V.N.; PASHCHUK, V.P.;
RUBANOVA, F.G.; SENCHUK, T.T.; SMIRNOVA, Ye.I.

Summerized results of a study of natural focus infections in
White Russian S.S.R. Report no.2: Tularemia, brucellosis,
trichinosis. Zhur.mikrobiol.epid.i immun. 31 no.2:65-68 F '60.
(MIRA 13:6)

1. Iz Belorusskogo instituta epidemiologii, mikrobiologii i
gigiyeny.

(TULAREMIA epidemiol.)
(BRUCELOSIS epidemiol.)
(TRICHINELLA epidemiol.)

RUBANOVA, F. G.

"A description of the natural foci of tularemia in Belorussia." p. 200.

Desyatoye Soveshchaniye po parazitologicheskim problemam i prirodnouchagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

Belorussian Inst. of Epidemiological, Microbiology and Hygiene/Minsk

32077
S/181/61/003/012/011/028
B102/B108

24,7700 (1136, 1164, 1385)

AUTHORS: Martsinovskaya, E. G., Matskevich, T. L., and Rubanova, G. M.

TITLE: Secondary electron emission from iodine

PERIODICAL: Fizika tverdogo tela, v. 3, no. 12, 1961, 3634 - 3636

TEXT: The coefficients of secondary electron emission, σ , and of inelastic reflection, η , as dependent on primary electron energy u_p were determined by means of an arrangement described before (T. L. Matskevich, E. G. Mikhaylova. FTT, 2, 4, 709, 1960). σ and η were measured for $200 \leq u_p \leq 3000$ ev by the method of single pulses. The pressure in the vacuum vessel was $5 \cdot 10^{-8} - 1 \cdot 10^{-7}$ mm Hg. The iodine films examined were vapor-plated upon graphite or molybdenum backings. $\sigma(u_p)$ and $\eta(u_p)$ were measured at room and nitrogen temperatures, σ and η as functions of the plating time t , i. e. of the film thickness, were also determined. $\sigma_{\max}$ as determined from the $\sigma(u_p)$ curve for I was 1.4 (Fig. 2). From the $\sigma(t)$ -curves for I upon Mo, the depths from which the slow secondary electrons

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B102/B108

Secondary electron emission...

emerge were estimated for $u_p = 500, 1000$ and 3000 ev. They were $570, 840$ and $1100 \text{ \AA}$, respectively. ^PIn this estimation it was assumed that the energy distribution of the inelastically reflected electrons is the same for both I and Mo. L. N. Dobretsov is thanked for assistance. There are 4 figures and 3 references: 1 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: E. J. Sternglass, Phys. Rev. 96, 345, 1954; R. N. Xoyarg, Trans. Farad. Soc., 35, 1401, 1939. 4

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR
Leningrad (Physicotechnical Institute imeni A. F. Ioffe
AS USSR, Leningrad)

SUBMITTED: July 3, 1961

Fig. 1. $\sigma(t)$ and $\eta(t)$ for iodine on graphite at $u_p = 2500$ ev.

Fig. 2. $\sigma(u_p)$ for iodine (1), graphite (2) and molybdenum (3).

Fig. 3. $\eta(u_p)$ for iodine (1) and graphite (2).

Card 2/2

RUBANOVA, K.T.

Analysis of some economic indices of the work of the
groups and shock workers of communist labor. Nauch. trudy
LTA no.99:133-144 '62. (MIRA 17:1)

FILIPPOVICH, V.I., nauchnyy sotr.; RUBANOVA, I., red.; GRODSKAYA, R.,
tekhn. red.

[Sports gymnastics; program for the sports sections of
physical education and training groups in eight-year and
secondary schools] Sportivnaia gimnastika; programma dlia
sportivnykh seksii kollektivov fizicheskoi kul'tury vos'-
miletnikh i srednikh shkol. Moskva, Izd-vo "Fizkul'tura i
sport," 1962. 83 p. (MIRA 17:2)

1. Soyuz sportivnykh obshchestv i organizatsiy SSSR. Tsentral'-
nyy sovet. 2. Nauchno-issledovatel'skiy institut fizicheskogo
vospitaniya i shkol'noy gigiyeny Akademii pedagogicheskikh nauk
RSFSR (for Filippovich).

RUBANOVA, L.F.

Work practice in industrial sanitation supervision by the Rostov-on-Don Municipal Station for Sanitation and Epidemiological Control.
S.I. Zinov'eva, A.V. Buzunova, L.F. Rubanova. Gig. i san. no.11:45-47
N° 153.

ZINOV'YEVA, S.M.; BUZUNOVA, A.V.; RURANOVA, L.F.

Work practice in industrial sanitation supervision by the Rostov-on-Don
Municipal Station for Sanitation and Epidemiological Control. Gig. i san.
no. 11:45-47 N '53. (MLRA 6:10)

1. Rostovskaya-na-Donu gorodskaya sanitarno-epidemiologicheskaya stantsiya.
(Rostov-on-Don--Industrial hygiene)

AUTHOR: Rubanova, M.R., Candidate of Technical Sciences, and 314
Pushkin, V.P., Technician.

TITLE: A new method of inspecting welded joints on steam piping
made of austenitic steel. (Novyy metod kontrolya svarnykh
stykov paroprovoda iz austenitnykh staley.)

PERIODICAL: "Energomashinostroenie"; (Power Machinery Construction),
1957, No. 5, pp. 22 - 25, (U.S.S.R.)

ABSTRACT: When using ultrasonic defectoscope methods the most difficult
case is that of heavy welded joints of austenitic steel. When
ultrasonic waves are propagated in thick welded metal, and
particularly in the zone of thermal influence, their intensity
is greatly weakened by dispersion on the boundaries of crystall-
ites. This causes a reduction in the depth of penetration of
ultrasonic waves into the metal and reduces the sensitivity of
this method of inspecting welded joints. False signals, which
do not really originate in a defect are also observed. They
are caused by the reflection of the ultrasonic waves from the
boundary of separation of the main metal and the weld which
represents a sharp transition from fine grain to coarse grain
structure.

This article describes work carried out by the Instrument
Division of the Central Scientific Research Institute of Heavy
Engineering in 1956, to develop procedures for the inspection
in production of welded joints on steam piping of 219 x 27 mm
diameter (made from steels EI-257 and 1Kh18H12T) by ultrasonic
methods. The development work was carried out on lengths of

A new method of inspecting welded joints on steam ³¹⁴piping made of austenitic steel. (Cont.)

piping which had been welded and heat-treated at the Podolsk engineering works. Work was also done on steam piping for super-high steam conditions of the Cherepets power station. The ultrasonic method is now widely used for the inspection of welded joints during erection and major overhauls of power equipment. Ultrasonic and radiographic inspection methods were compared and it was found that thin cracks, which are typical defects of welded joints, are revealed only by the ultrasonic procedure.

The defects discovered as a result of preliminary examination of 70 welds in super-high-pressure steam piping of the Cherepets station are classified into the following groups:

- (1) groups of pits in the weld and the main metal;
- (2) transverse cracks and pits along the line of melting;
- (3) pits and cracks in the welded joints that were not heat-treated; (4) longitudinal cracks formed in the welded metal when unconditioned electrodes were used; (5) cracks in the root of the welded joint. The ultrasonic inspection procedures were studied on standard specimens with large artificial defects in the upper and lower parts of the welded joints. In this way, the best position for the probe was determined. It is necessary not only to locate the defect within the thickness of the weld but also to determine the

A new method of inspecting welded joints on steam piping made of austenitic steel. (Cont.)

zone in which it is formed (welded metal, main metal, or region of thermal influence) and the appropriate procedure is described. The procedure for estimating the size of defect is described. The dimensions of localised defects are estimated from dimensions of their equivalent areas on comparing the amplitude of the signal reflected from the defect with the amplitude of the signal reflected from the standard hole in the standardised specimen. The dimensions of a defect of the type of a transverse crack in a steam pipe is determined by moving the probe along the weld, an intense reflected signal is obtained at the ends of the defect. The development of a defect within the thickness of the welded joint can be evaluated approximately by moving the probe perpendicular to the welded joint. In the majority of cases longitudinal cracks are concentrated in the upper half of the welded joint and are concentrated together. A number of examples are given of the commonest type of defects observed in samples in which the welding procedure was made abnormal with the aim of artificially forming cracks and also in production specimens and welded joints of actual steam pipes.

The following conclusions are drawn from the work which was carried out. It is in principle possible to inspect welded joints on steam pipes of 219 x 27 mm diameter made from steels EI-257 and 1Kh-18H12T. For this purpose a special ultrasonic defectoscope was developed with a working frequency

A new method of inspecting welded joints on steam piping³¹⁴
made of austenitic steel. (Cont.)

of 1.8 Mc/s and prismatic probes operating at lower frequencies. An ultrasonic inspection procedure was also developed that passed production tests and is fully applicable for the inspection of welded joints on power station steam piping. Comparisons of the results of ultrasonic examination with cut sections of the welds and metallographic investigation of the defective zone of the welded joints confirm the effectiveness of the ultrasonic inspection procedure for welded joints of austenitic steel that have been heat-treated. It was established that it is possible reliably to reveal various defects of welding located in any part of the welded joint, such as transverse and longitudinal cracks (including internal, superficial and sub-surface). The presence of an accumulation of small longitudinal cracks 1.5 - 2 mm deep in the sub-surface layer of metal can be determined and individual non-metallic inclusions with an equivalent area not less than 20 mm² can be observed. The procedure that was developed can be used to determine the co-ordinates of the defects, their extent or approximate size, their equivalent area and probable character. In the absence of any criteria about permissible defects it is not possible to reject welds at a power station because of defects discovered by ultrasonic methods. Therefore, in order to accumulate material, careful observations should be made on

A new method of inspecting welded joints on steam piping³¹⁴
made of austenitic steel. (Cont.)

a number of joints on which various types of defect have been observed so that the development of the defects in operation can be followed. In order to perfect the method of inspection and to extend experience in the interpretation of oscillograms the accumulation should be continued of statistical material to compare defectoscope readings obtained during production inspection with the results of surface examination and etching. The procedure developed can be used for the inspection of other steam pipes including for instance 245 x 30 mm diameter, 194 x 24 mm diameter, 133 x 18 mm diameter of austenitic steel and 273 x 28 mm diameter, 425 x 20 mm diameter and 425 x 50 mm diameter of pearlitic steel. However, when using the procedure described for steam pipes of other wall thicknesses (differences of pipe diameter are not vital) it is necessary to prepare standard specimens analogous with those described above for each of the types of pipe. In this case the instrument is adjusted for each type of pipe with the corresponding standard specimen.
8 figures, no literature references.

PRUSLIN, Z.M.; RUBANOVA, N.A., otv. red.; ALEKSEYEVA, T.D., red.

[Two-electrode tube; manual on a course in "Electronic and transistor devices" (no.2 of the section "Electronic devices")] Dvukhelektrodnaya lampa; uchebnoe posobie po kursu [Elektronnye i poluprovodnikovye pribory" (vtoroi vypusk po razdelu "Elektronnye pribory"). Moskva, Vses. zaachnyi elektrotekhnicheskii in-t svyazi, 1963. 46 p. (MIRA 16:11)

(Diodes)

RUBANOVA, N.A.; PRUSLIN, Z.M., otv. red.; ALEKSEYEVA, T.D., red.

[Semiconductor rectifiers] Poluprovodnikovye vypriamiteli.
Moskva, 1962. 38 p. (MIRA 16:5)

1. Vsesoyuznyy zaochnyy elektrotekhnicheskii institut svyazi.
(Electric current rectifiers)
(Semiconductors)

KUBHACVII, V

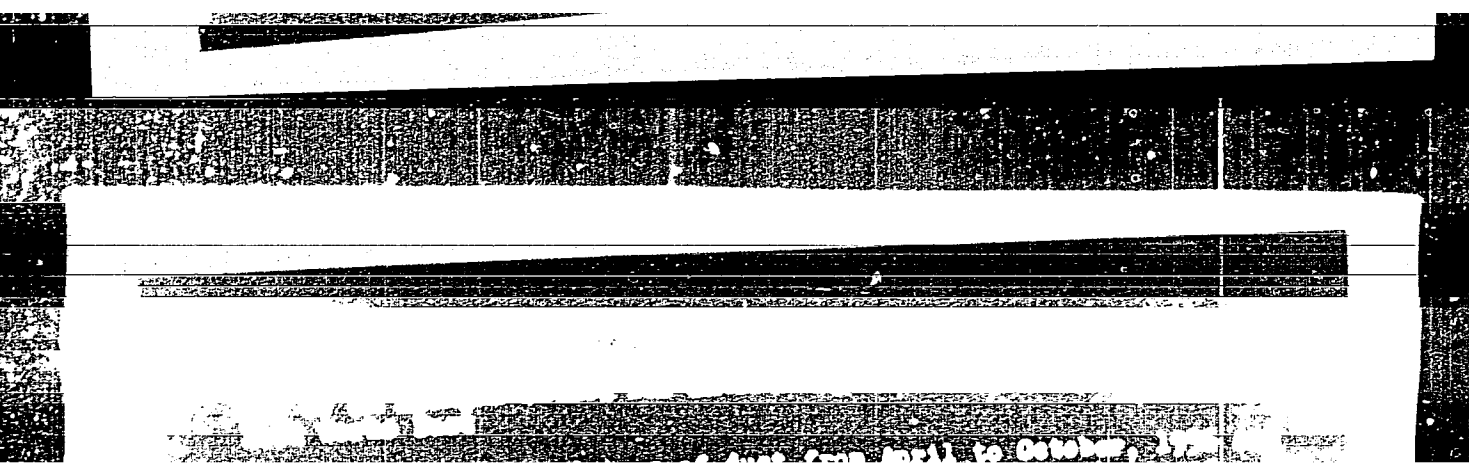
One of an analysis method for determining the
elemental lead works dust (primarily lead, cadmium,
manganese, iron, and copper) in pyrolytic carbonaceous
materials (see also).

Investigative Method, 1978, No. 1, pp. 10-11.

The method described was based on the following:

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R001445810004-4



APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R001445810004-4"

NESHEL', Ye.V.; RUBANOVA, Ye.A.

Problem of adenomatosis of the lungs. Sov.med. 24 no. 9-101-
104 S '60. (MIRA 13:11)

1. Iz kafedry fakul'tetskoy terapii (zav. - prof. T.S. Istamanova)
I Leningradskogo meditsinskogo instituta imeni akad. I.P. Pavlova.
(LUNGS---TUMORS)

1. GEORGIYEVSKAYA, L. M.: RUBANOVA, Ya. A.: BEREZHNOVA-SOLOV'YEVA, R.A.:
BLAGOSKLONNAYA, Ya. V.: ZHUKOV, M. V.
2. USSR (600)
4. Emphysema, Pulmonary
7. Acid-base equilibrium in the blood serum in pulmonary emphysema in the
different stages of respiratory insufficiency. Terap. arkh. 24 No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

GEORGIYEVSKAYA, L.M.; RUBANOVA, Ye.A.; BEREZHNOVA-SOLOV'YEVA, R.A.; BIAGOSKLONNAYA,
Ya.V.; ZHUKOV, M.V.

Acidbase equilibrium in the blood serum in pulmonary emphysema in
various stages of respiratory insufficiency. Ter. arkh., Moskva
24 no.4:23-31 July-Aug 1952. (CIML 23:2)

1. Of the Faculty Therapeutic Clinic (Acting Head -- Prof. T. S.
Istamanova), First Leningrad Medical Institute imeni Academician I. P.
Pavlov.

RUBANOVA, Ye.O.

Standardization and its study. Standartizatsiia 29 no. 11:
15 N '65 (MIRA 19:1)

RUBANOVICH, A. A.

USSR/Medicine - Nervous System
Medicine - Diseases

Jan 1948

PA 7786
"Problem of Mixed Nerve Infections," A. A. Rubanovich, Candidate Med Sci, Clinic Nerve Diseases, Voronezh Med Inst, 4 pp

"Neuropat i Psikhiaz" Vol XVII, No 1

Recently ten cases of meningitis among syphilis patients at Voronezh Clinic for Neuropathy. Further studies conducted to determine how far mixed nerve infections develop. Determined that those suffering from syphilis could be afflicted with other types of disease. In any case, established that virus can complicate microbe-type diseases, and microbes can

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USSR/Medicine - Nervous System (Contd) Jan 1948

complicate virus-type diseases. Submitted for publication, 11 Aug 1947. Deputy of Clinic of Nerve Diseases: Prof N. M. Itsenko.

12786

RUBANOVICH, A. A.

RUBANOVICH, A. A. "The role of trauma in the development of tumors of the brain",
Trudy Voronezhsk. gos. med. in-ta, Vol. XVIII, 1949, p. 97-101.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statey, No. 24, 1949).

RUBANOVICH, A. A.

RUBANOVICH, A. A. "Homolateral symptoms in tumors of the hemispheres of the brain",
Trudy Voronezhsk. gos. med. in-ta, Vol. XVIII, 1949, p. 101-07.

SO: C-1631, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statey, No. 24, 1949).

RUBANOVICH, A. A.

RUBANOVICH, A. A. "On the problem of central paralyzes occurring with weak tone",
Trudy Voronezhsh. gos. med. in-ta, Vol. XVIII, 1949, p. 178-85.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statey, No. 24, 1949).

~~RUBANOVICH, A.A.~~, kandidat meditsinskikh nauk.

Additional remarks on the problem of mixed neural infections.
Vest.ven.i derm. no.6:43-45 N-D '53. (MLRA 6:12)

1. Iz kliniki nervnykh bolezney (zaveduyushchiy - professor
N.M.Itsenko) Voronezhskogo meditsinskogo instituta.
(Syphilis) (Nervous system--Diseases)

~~MEZO, T.S.~~; RUBANOVICH, A.A., kand. med. nauk

Case of congenital deformation of the scapula in combination
with a supernumerary omovertebral bone. Ortop., travm. i protez.
23 no. 6:67-68 Je '62. (MIRA 15:9)

1. Iz rentgenologicheskogo i nevrologicheskogo otdeleniy 3-y
gorodskoy bol'nitsy g. Voronezha (glavnyy vrach - M.N. Yakhova).
(SCAPULA--ABNORMITIES AND DEFORMITIES)
(SPINE--ABNORMITIES AND DEFORMITIES)

PASECHNIK, O.A. [Pasiachnyk, O.A.]; RUBANOVICH, A.A. [Rubanovych, A.A.]

Determining sensitivity to antibiotics by the disk method for
children with pneumonia. Ped., akush. i gin. 20 no.5:29-31 '58.

(MIRA 13:1)

1. Kafedra pediatrii (zav. - prof. R.Yu. Kol'ner) lechebnogo fakul'-
teta Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo insti-
tuta im. A.A. Bogomol'tsa (direktor - dots. I.P. Alekseyenko) na baze
1-y Dorozhnoy bol'nitsy g. Kiyeva (nach. - Z.Z. Bokhanovich).
(PNEUMONIA) (ANTIBIOTICS)

ITSKOVICH, A.A., inzh.; SINYAKOVSKIY, V.A., inzh.; RUBANOVICH, B.B., inzh.

A device for the preparation of ~~aluminum~~ alloy surfaces for
glued and welded joints. Svar. proizv. no.8:33-34 Ag '65.
(MIRA 18:8)

L 51448-65 EWT(d)/EWT(m)/EWP(w)/EPF(c)/EWP(i)/EWA(d)/EWP(v)/EPR/EWP(j)/
 T/EWP(t)/EWP(l)/EWP(b)/EWA(c) Po-4/Pf-4/Pr-4/Ps-4 IJP(c) JD/HM/WN/
 EM RM
 UR/0135/65/000/004/0022/0025 60
 621.791.763.1:668.395:624.C14.25 -9
 B
 ACCESSION NR: AP5009673

AUTHOR: Rubanovich, B.B. (Engineer); Itskovich, A. A. (Engineer); Sinyakovskiy,
V. A. (Engineer)

TITLE: Spot welding of glued structural panels

SOURCE: Svarochnoye proizvodstvo, no. 4, 1965, 22-25/

TOPIC TAGS: structural sandwich panel, aluminum clad panel, glued panel welding,
 weld joint, epoxy glue / EPTs adhesive

ABSTRACT: The authors selected cold-curing EPTs adhesive (by weight: 100 parts
 epoxy resin ED-5 or ED-6, 20 parts polyester MGF-9 or TGM-3, 25 parts hexamethy-
 lene diisocyanate hardener and 50 parts cement as filler) and optimal

panels were 50% higher than without the adhesive. ORIG. REC. 10000
and 2 tables.

Card 1/2

L 51448-65

ACCESSION NR: AP5009673

ASSOCIATION: TsNIISK Gossstroya SSSR

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, MT

NO REF SOV: 004

OTHER: 000

L 9534-66 EWT(m)/EWP(v)/T/EWP(t)/ENP(k)/EWP(b)/EWA(c) ID/HM
ACC NR: AP5026293 SOURCE CODE: UR/0125/65/000/010/0052/0054

AUTHOR: Shleymovich, S. S. (Engineer); Vorob'yev, V. V. (Engineer); Rubanovich, B. B. (Engineer)
44,55 44,55 44,55 62 56 B

ORG: [Shleymovich] Ministry of River Fleet RSFSR (Ministerstvo rechnogo flota RSFSR); [Vorob'yev] Orgenergostroy; [Rubanovich] Trest "Stal'konstruktsiya"
44,55 44,55

TITLE: Experience in unshielded arc welding with bare alloy wire
44,55 44,55 6

SOURCE: Avtomaticheskaya svarka, no. 10, 1965, 52-54

TOPIC TAGS: unshielded arc welding, welding technology, shipbuilding engineering, construction

ABSTRACT: Mechanized unshielded arc welding with bare alloy wire, developed in 1962 at the Ye. O. Paton Institute of Electric Welding, dispenses with the use of shielding atmospheres which is of major importance to mechanizing welding operations in shipbuilding and construction. What is more, it reduces by 35-40% the number of transverse deformations compared with manual and submerged-arc welding. The technique has been used with positive results to mechanize reinforcement-welding operations during the construction of poured-on-the-spot and precast reinforced concrete structures in the Konakovo, Kirishev and Burshtyn power stations, where it has served to markedly

Card 1/2

UDC: 621 791.753.037

L 9534-66

ACC NR: AP5026293

6

reduce the cost and time of the construction and assembling operations. The related experience shows that use of this technique to weld 100 joints of 40 mm thick reinforcement in the vertical position saves about 450 rubles and in the bottom position, 165 rubles (compared with manual welding). Mechanized unshielded arc welding has also been introduced since 1963 at the Gomel and Astrakhan shipyards, with similarly satisfactory results. In addition, it has been used to weld together sheets of structural metal. It is a technique that assures an increase in productivity and reduction in production cost in conditions when other methods of mechanized welding are not applicable. Orig. art. has: 3 figures, 2 tables.

SUB CODE: 11,13/ SUBM DATE: 09June65/ ORIG REF: 003/ OTH REF: 000

lech
Card 2/2

L 2299-66 EWP(e)/EWT(m)/EPF(c)/EWP(i)/EWP(v)/EWP(j)/T/EWP(t)/EWP(k)/EWP(b)/

EWA(c) JD/WW/HM/RM/WH
ACCESSION NR: AP5020166

48B UR/0135/65/000/008/0033/0034
621.791.039

44.55
AUTHORS: Itskovich, A. A. (Engineer); Sinyakovskiy, V. A. (Engineer); Rubanovich, B. B. (Engineer)

44.55
TITLE: Apparatus for preparation of aluminum alloy surfaces for adhesive-welded connections 15,44.55

SOURCE: Svarochnoye proizvodstvo, no. 8, 1965, 33-34

TOPIC TAGS: metal bonding, welding, adhesive bonding, surface finish, surface preparation

ABSTRACT: Since bonded joint quality depends to a large extent on the preparation of the bonded surfaces, an optimum chemical or mechanical surface preparation method should be used for each bonding method. For mechanical surface preparation small steel wire brushes (wire diameter 0.2 mm, outside diameter 100 mm, inside diameter 30-40 mm, width 8-15 mm, speed 1200-3000 rpm) are recommended for best results. The authors developed a simple apparatus for cleaning large construction parts (up to 6 m long) at a speed of up to 2.5 m/min. It consists of a 1 kw, 930 rpm motor with a 250-mm long horizontal pendulum lever pivoted on the motor axis.

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L 2299-66

ACCESSION NR: AP5020166

The end removed from the motor has a bearing-mounted axle driven by V-belts from the motor (2:1 speed increase) on which 2-5 brushes can be mounted. The brushes are held against the work by a damping system consisting of two opposing springs which provide almost constant contact force despite slight irregularities of the work piece. The surface produced is evaluated at 2-60 μ ohms for welding. The aluminum dust should be removed from the surface by brushing or with alcohol (acetone is not acceptable). Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

SUB CODE: MM, IE

OTHER: 000

Card 2/2 *DP*

SHLEYMOVICH, S.S.; VOROB'YEV, V.V.; RUBANOVICH, B.B.

Experience in welding with an open arc and with an uncoated alloyed wire. Avtom. svar. 18 no.10:52-54 O '65. (MIRA 18:12)

1. Ministerstvo ratchnogo flota RSFSR (for Shleymovich).
2. Vsesoyuznyy institut po proyektirovaniyu organizatsiy energeticheskogo stroitel'stva (for Vorob'yev).
3. Trest "Stal'konstruktsiya" (for Rubanovich).

POPOVICH, A.G.; INZH.; KUBANOVICH, R.B.; INZH.; SIVILTSKIY, V.A.; INZH.

aligned plate joints in 31' and 41' elements. from. circ¹. 12 no. 62
(DIN 12:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktov Gosstroya SSSR.

RUBANOVICH, D.I.

Oil and moisture separator for compressed air. Prom.energ. 16
no.6:30-33 Je '61. (MIRA 15:1)
(Air compressors--Equipment and supplies)

Рубанович, Д.И.
RUBANOVICH, D.I., inzh.

New rules for installation and operation of oxyacetylene
pipelines are needed. Bezop. truda v prom. 2 no.1:18 Ja '58.
(MIRA 11:1)

1.Gosudarstvennyy Soyuznyy proyektnyy institut No. 2.
(Pipelines)

RUBANOVICH, G.L.

Acute appendicitis with ascarids in the appendix and total situs inversus. Khirurgia 35 no.2:113-114 F '59. (MIRA 12:5)

1. Iz khirurgicheskogo otdeleniya (nachal'nik A.I.Milina)
Detskoy zheleznodorozhnoy bol'nitsy (nachal'nik S.Ye.Krasil'-
nikov) Ufimskoy zheleznoy dorogi.

(SITUS INVERSUS, compl.

appendicitis & appendicular Ascaris (Rus))

(APPENDICITIS, compl.

Ascaris in appendix & situs inversus (Rus))

(ASCARIASIS, compl.

situs inversus & appendicitis with Ascaris in
appendix (Rus))

RUBANOVICH, G.I. (Knybyshev (obl.) ul. Galaktionovskaya, d.179, kv.2)

Observations of two cases of appendiceal tumors. Vop.onk. 5 no.7:87-90 '59. (MIRA 12:12)

1. Iz kliniki fakul'tetskoy khirurgii (zav. - prof. S.L. Libov)
Knybyshevskogo gosudarstvennogo meditsinskogo institut i Detskoy
zhel.-dor.bol'nitsy (nach. - S.Ye. Krasil'nikov) Ufimskoy zheleznoy
dorogi.

(APPENDIX - neoplasms)

RUBANOVICH, G.L.; GROZOVSKAYA, A.M.

Acute appendicitis and dysentery [with summary in English]. Klin.med.
37 no.2:71-76 F '59. (MIRA 12:3)

1. Iz khirurgicheskogo i dizenteriyogo otdeleniya Detskoy zhelezno-
dorozhnoy bol'nitsy Ufimskoy zheleznoy dorogi (nach. bol'nitsy S.Ye.
Krasil'nikov).

(APPENDICITIS, differ. diag.

dysentery, bacillary (Rus))

(DYSENTERY, BACILLARY, differ. diag.

appendicitis (Rus))

EXCERPTA MEDICA Sec 16 Vol 7/10 Cancer October 59

*1384. **Appendicular tumours (Russian text)** RUBANOVICH G. L. State Med. Inst., Kuibishev *Vopr. Onkol.* 1959, 5/7 (87-90)

Report of 2 cases: a malignant carcinoid, and a colloid carcinoma. The clinical picture had been that of recurrent appendicitis. The diagnosis was made at operation, and was confirmed histologically. The tumours did not extend to the caecum. The colloid carcinoma had probably developed on the basis of a pseudomyxoma.

LEVINA, Z.I. (Kuybyshev, ul. Galaktionovskaya, d.179, kv.2); RUBANOVICH, G.L.

Functional disturbance of external respiration in patients with
bilateral lesions of the lungs. Grud. khir. 2 no.3:67-73 My-Je
'60. (MIRA 15:3)

1. Iz Fakul'tetskoy khirurgicheskoy kliniki (zav. - prof.
S.L. Libov) Kuybyshevskogo meditsinskogo instituta (dir. D.A.
Voronov).

(RESPIRATION)

(LUNGS--DISEASES)

RUBANOVICH, G.L.; PAVLOV, R.K.

Use of the muscle relaxant, decamethonium (procurean). Khirurgiia
no.12:21-26 '61. (MIRA 15:11)

1. Iz kliniki fakul'tetskoy khirurgii (zav. - prof. S.L. Libov)
Kuybyshevskogo meditsinskogo instituta.
(CURARELIKE SUBSTANCES)

SEMENOVA, L.P.; RUBANOVICH, G.L.; PAVLOV, R.K.

Surgery in knife wounds of the heart performed under conditions of clinical death. Vest.khir. 86 no.3:115-116 Mr '61.

(MIRA 14:3)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. S.L. Libov) Kuybyshevskogo meditsinskogo instituta. Adres avtorov: Kuybyshev (obl.) Semeykenskoye shosse, klinicheskaya bol'nitsa, fakul'tetskaya khirurgicheskaya klinika.

(HEART--WOUNDS AND INJURIES)

(RESUSCITATION)

BANDALIN, B. N.; RUBANOVICH, G. L.; SHIRYAYEVA, K. F.

Bronchography under anesthesia in children. Khirurgiia no.6:
50-57 Je '62. (MIRA 15:7)

1. Iz kafedry rentgenologii (zav. - prof. Ye. L. Kevesh) i
kafedry fakul'tetskoy khirurgii (zav. - prof. S. L. Libov)
Kuybyshevskogo meditsinskogo instituta.

(BRONCHI--RADIOGRAPHY) (PEDIATRIC ANESTHESIA)

LIBOV, S.L., prof.; RUBANOVICH, G.L.

Importance of the investigation of external respiration in
the surgery of lung abscesses. Zdrav. Bel. 9 no. 2:3-7 F'63.

(MIRA 16:7)

1. Kafedra grudnoy khirurgii Belorusskogo gosudarstvennogo in-
stituta dlya usovershenstvovaniya vrachey i otdeleniye torakal'-
noy khirurgii 2-y klinicheskoy bol'nitsy g. Minska (zav. kafedroy
prof. S.L. Libov, glavnyy vrach - B.V. Drivotinov).

(LUNGS—ABSCCESS) (LUNGS—SURGERY)
(RESPIRATION)

LIBOV, S.L.; ROKITSKIY, M.R.; RUBANOVICH, G.L. (Kuybyshev (obl.), ul.
Galaktinovskaya, d. 179, kv.2)

Characteristics of respiratory disorders during some stages of
intrathoracic operations. Grund. khir. 5 no.4:55-61 J1-Ag'63
(MIRA 17:1)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof.
S.L.Libov) Kuybyshevskogo meditsinskogo instituta.

RUBANOVICH, G.L., kand. med. nauk; BANDALIN, B.N.

Method of bronchography for children. Vest. rent. i rad. 40
no.6:57-59 N-D '65. (MIRA 19:1)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. G.L. Ratner)
i kafedra rentgenologii i radiologii (zav. - prof. Ye.L. Kevesh)
Kuybyshevskogo meditsinskogo instituta.

RYUGAS, E.M. [Roigas, F.] kand. med. nauk; RUBANOVICH, I.L. (Tallin)

Effectiveness of a culture in the diagnosis of gonorrhea and trichomoniasis of the urogenital tract under the condition of a dermatovenerological dispensary. Vest. dermat. i ven. 38 no.3: 65-68 Mr '64. (MIRA 18:4)

1. Sektor protozoologii i mikrobiologii (zav. - kand. med. nauk Yu.Kh. Teras [J. Teras]) Instituta eksperimental'noy i klinicheskoy meditsiny (dir. - prof. P.A. Bogovskiy) AMN SSSR i Respublikanskiy kozhno-venerologicheskoy dispensar (glavnyy vrach R. Uuetoa) Estonskoy SSR.

GRODKO, V.A.; ZOLOTAREVSKIY, V.S.; MARKAR'YAN, B.N.; RUBANOVICH, I.M.

Selection of efficient cathodic materials for a thermoelectron converter. Porosh. met. 3 no.4:79-88 J1-Ag '63. (MIRA 16:10)

1. Institut dvigateley AN SSSR.
(Electrodes) (Thermoelectric generators)

RUBANOVICH, I.M.

Theory applied to the design of rotor contours used in Ruth superchargers.
Trudy lab.dvig. no.1:122-166 '55. (MIRA 9:9)
(Superchargers)

20427

S/109/60/005/012/025/035
E192/E582

26,2531

AUTHORS: Grodko, V.A., Zolotarevskiy, V.S., Markar'yan, B.N.
and Rubanovich, I.M.

TITLE: Influence of the Difference Between the Work Functions
of the Electrode of a Thermionic Converter on its
Output Parameters

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.12,
pp. 2046-2051

TEXT: The dependence of the specific power w and the
electron efficiency η on the difference
functions, ϕ_K and ϕ_a , is investigated analytically. For the
purpose of calculations it is assumed that the temperatures
 $T_a = \text{const}$ and $T_K = \text{const}$ but $T_K > T_a$; it is also assumed that
 $\phi_a = \text{const}$. Further, the case when the density of the saturation
current of the cathode is less than that of the anode is excluded.
The voltage current characteristic of a thermionic energy converter
can, therefore, be expressed by

$$i = A_K T_K^2 \exp \left(- \frac{e\phi_K}{kT_K} \right) - A_a T_a^2 \exp \left(- \frac{e\phi_a}{kT_a} \right) \quad (1)$$

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Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

where Φ is the overall potential barrier of an electrode, e is the charge of an electron and k is the Boltzmann constant. The potential diagram of such a converter, illustrating the dependence of Φ_K and Φ_a on U (where $U = \Phi_K - \Phi_a$) is represented in Fig.2. It is seen that in the region I of this figure $\Phi_K = \varphi_K = \text{const}$ and $\Phi_a = \varphi_a = \text{const}$. Eq.(1) can now be written in a different form so that the current i is expressed as a function of U . Now the voltage current characteristic of the limiting case, when $\varphi_K = \varphi_a$, is shown to be in the form of an envelope for all the intermediate characteristics and the second limiting case when $\varphi_K = U_0 + \varphi_a$, where U_0 is the electro-motive force of the converter. Such an envelope is shown in Fig.3; this also shows three characteristics for various values of φ_K at fixed values of φ_a , T_K and T_a . From the investigation of the envelope it is concluded that the maximum specific power of the converter is numerically equal to the area of the largest possible rectangle

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S/109/60/005/012/025/035
E192/E582

Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

which can be inscribed inside the envelope. The problem of determining this quantity is equivalent to finding the coordinate U_B of the point B of the characteristic at which the maximum power $w_{\max}$ is obtained (see Fig.3). On the basis of Eq.(1) it is shown that the specific power is expressed by

$$w = (\bar{\Phi}_K - \varphi_a) \left[A_K T_K^2 \exp \left(- \frac{e \bar{\Phi}_K}{k T_K} \right) - A_a T_a^2 \exp \left(- \frac{e \varphi_a}{k T_a} \right) \right] \quad (3)$$

There is a considerable difficulty in determining the maximum of this function since its derivative $\partial w / \partial \bar{\Phi}_K = 0$ cannot be solved with respect to $\bar{\Phi}_K$. It is shown, however, that a double inequality specifying the limits for $\bar{\Phi}_K$ can be determined. From this inequality it is found that the voltage at point B (see Fig.3) is approximately given by

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Influence of the Difference Between the Work Functions of the
Electrode of a Thermionic Converter on its Output Parameters

$$U_B = (\Phi_K - \Phi_A) w_{MAHO} - \frac{\kappa T_K}{\varepsilon} \left\{ 1 - \frac{A_A T_A^2}{2 A_K T_K^2} \exp \left[1 - \frac{e \Phi_A}{\kappa} \left(\frac{1}{T_A} - \frac{1}{T_K} \right) \right] \times \right. \\ \left. \times \left[1 + \exp \left(- \frac{T_K + T_A}{T_K} \right) \right] \right\}. \quad (5)$$

The electron efficiency η_e (J. M. Houston, Ref.5) is taken to
include only the losses due to the heat transfer by the electrons;
this quantity is expressed by

$$\eta_e = \frac{iU}{i\Phi_K + \frac{2\kappa}{\varepsilon} (i_K T_K - i_A T_A)} \quad (6)$$

This expression is investigated for the region of the accelerating
field as well as for decelerating fields and the results are shown

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S/109/60/005/012/025/035

E192/E582

Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

in two figures. From the analysis it is concluded that, other conditions being equal, the highest specific power and electron efficiency can be obtained when φ_a is very low. A converter having $\varphi_a = \varphi_K$, other parameters being fixed, gives the highest specific power and electron efficiency possible with these parameters. The converters in which $\varphi_K - \varphi_a \leq \sim kT_K/e$ can also give the maximum specific power but the short circuit current in this case is lower. All the converters having $\varphi_K - \varphi_a > kT_K/e$ cannot give the maximum specific power. There are 6 figures and 6 references, 3 Soviet (one a translation from English) and 3 non-Soviet.

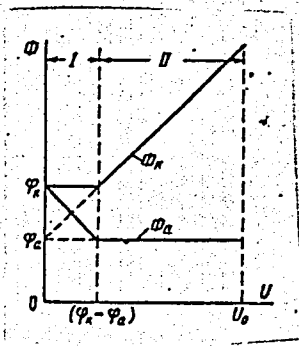
SUBMITTED: May 21, 1960

Card 5/6

S/109/60/005/012/025/035
E192/E582

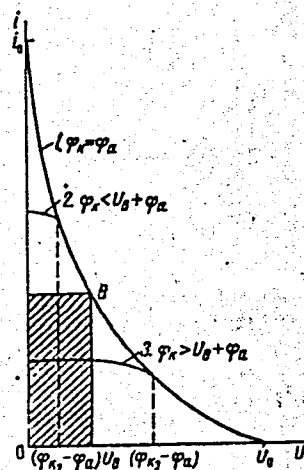
Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

Fig.2



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Fig.3



L 21309-66 EWT(I)/T IJP(c) AT

ACC NR: AP6006192

SOURCE CODE: UR/0377/65/000/004/0011/0022

AUTHOR: Rubanovich, I. M.

ORG: All-Union Order of Workers, Red Banner Scientific Research Institute of
Current Sources (Vsesoyuznyy ordena Trudovogo Krasnogo Znameni n.-i. institut
istochnikov toka)

TITLE: Determining optimum dimensions of high-temperature cavity-type receivers of
solar energy 21, 44, 55

SOURCE: Gelliotekhnika, no. 4, 1965, 11-22

TOPIC TAGS: solar energy, solar radiation, solar furnace, radiation heat transfer, optics

ABSTRACT: An investigation was made to determine the optimum dimensions of a solar energy receiver and concentrator. The schematic of the solar furnace is shown on Fig. 1 where the theoretical energy distribution in the focal point is given by curve 1 and the actual distribution, by curve 2. Curve 3 indicates the Gaussian distribution of the reflected beam from the parabolic receiver (mirror). The expression for the energy distribution at the focus is given by

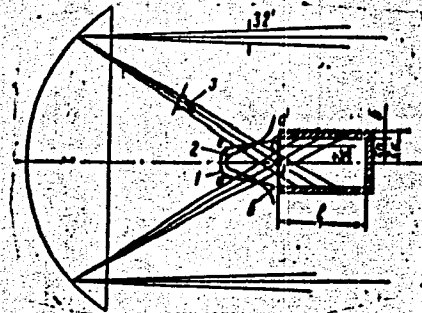
$$E = E_{\max} e^{-Cr}$$

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I 21309-66

ACC NR: AP6006192

Fig. 1. Schematic of solar furnace.



where E is the streaming density at the focus, r is the streaming radius of the focus, and C is a constant determined from the mirror-concentrator optics

$$C = \left[\frac{180}{\pi} \frac{h}{p} (1 + \cos \beta) \right]^2.$$

Two types of mirror losses are identified: reflected losses from the mirror aperture and losses due to self-radiation. An expression is derived for the irradiance coefficient of the mirror, a detailed energy balance is made between the incoming and reflected rays, and the following equation is obtained for the radius of the cavity

$$\sqrt{h} = \frac{F_{ss}}{2\pi r^2} - 0.5,$$

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ACC NR: AP6006192

$$r_n = \sqrt{\frac{F_{nn}}{2\pi(L+0.5)}}$$

when the surface area of the cavity remains constant. A numerical example is given corresponding to a fixed receiver-concentrator geometry, and conditions are listed for improving the receiver efficiency. Among these conditions are: an accurate concentrator, large cavity emissivity, and a surface of high reflectivity of solar radiation. Orig. art. has: 16 equations, 6 figures, and 1 table.

SUB CODE: 03/3 SUBM DATE: 31 May 65/ ORIG REF: 004/ OTH REF: 013

Card 3/3 ✓

GRODKO, V.A.; ZOLOTAREVSKIY, V.S.; MARKAR'YAN, B.N.; RUBANOVICH, I.M.

Effect of work function differences of electrodes on the output
parameters of a thermionic converter. Radiotekh. i elektron. 5
no.12:2046-2051 D 60. (MIRA 13:11)

(Work function) (Thermoelectricity)

RUBANOVICH, I.M., kandidat tekhnicheskikh nauk.

Shaping evolute rotors of volumetric pressure pumps of the But type. Vest.
mash. 33 no.7:14-19 J1 '53. (MLB 6:8)

(Pumping machinery)

RUBANOVICH, I. M.

AID Nr. 979-10 29 May

THERMOELECTRIC EMISSION PROPERTIES OF Z-C-UC SOLID SOLUTION
SYSTEMS (USSR)

Kul'var'skaya, B. S., V. A. Grod'ko, B. N. Markar'yan, and I. M. Rubanovich.
Radiotekhnika i elektronika, v. 8, no. 4, Apr 1963, 675-679.

S/109/63/008/004/018/030

The device used in the investigation was a diode with the cathode stamped from a tantalum strip in a shape permitting temperature compensation. The specimens were cemented to the working area of the cathode (0.10 cm^2) in thicknesses of 80μ . After vacuum processing, the specimens were detached in a vacuum of the order of 10^{-7} mm Hg , and measurements were made. The results were plotted along Schottky curves, from which the densities of the saturation current were determined. At 120 amp/cm^2 degree, the value of emission $\phi(T)$ was calculated by the Richardson-Dushman equation, and the

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AID Nr. 979-10 29 May

THERMOELECTRIC EMISSION PROPERTIES [Cont'd]

S/109/63/008/004/018/030

temperature coefficient was determined. It was found that all the investigated compounds of the system possess a rather high emitting capacity, substantially exceeding the thermoelectric emission of pure refractory metals. Compounds of the system from UC to $(ZrC)_{0.8} - (UC)_{0.2}$ inclusive have the highest thermoelectric emission rate. The $ZrC_{0.8} - UC_{0.2}$ compound is considered the best emitter of the whole system. Stable emission from the cathodes of the investigated system are obtained only after adequate aging at $2000^{\circ}K$. [DW]

Card 2/2

RUBANOVICH, K.V. (Astrakhanskaya oblast')

Various methods for solving geometrical problems in the 10th
grade course. Mat. v shkole no.5:57-59 S-O '59.

(MIRA 13:2)

(Geometry--Problems, exercises, etc.)

43271
S/842/62/000/000/002/006
E191/E435

1.2300

AUTHOR:

TITLE:

SOURCE:

2408
Rubanovich, L.L., Engineer

Possibilities of utilizing aluminium alloys in welded joints of crane structures

Primeneniye svarki v stroitel'nykh konstruktsiyakh. Vses. konfer. po prim. svarki v stroi. konstr., 1961. Moscow, Gosstroyizdat, 1962. 149-162

TEXT: Experiments with full scale test joints are reported; carried out by the Svarochnaya laboratoriya proyektirovaniya instituta Promstal'konstruktsiya (Welding Laboratory of the Design Institute "Promstal'konstruktsiya") in collaboration with the Laboratoriya metallokonstruktsiy (Metal Structures Laboratory) of the TsNIISK. The joints tested were similar to those in the jib of the BK-406A (BK-406A) 40 ton crane and all tests were carried out under static loads. Materials used included a non-heat treatable aluminium magnesium alloy AMr6 (AMg6) with an ultimate tensile strength of 32 kg/mm², a yield stress of 16 kg/mm² and an elongation of 15%, and a heat treatable aluminium magnesium silicon alloy AB-T1 (AV-T1), precipitation hardened and Card 1/3

capacity compared
alloy welded in a
but in this alloy values of
Semi-automatic welding does not

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Possibilities of utilizing ...

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increase the strength. Tubular rods, however, show 55% when manually welded and 80% when automatically welded. In this case, manual welding of tubes with closed ends gave higher values than open ends. There are 6 figures and 3 tables.

ASSOCIATION: NII Ministerstva stroitel'stva RSFSR
(NII of the Ministry of Constructions RSFSR)

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A006/A101

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AUTHORS:

2408
Shneyderov, R. G., Rubanovich, L. L., Engineers, Khokharin, A. Kh.,
Candidate of Technical Sciences

TITLE:

On the strength of welded assemblies in aluminum-alloy building
structures

PERIODICAL: Svarochnoye proizvodstvo, no. 12, 1962, 9 - 11

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TEXT: Tensile tests with static load were performed on welded assemblies of the lattice structure of a tower-crane arm. These parts were made of thermally non-hardenable aluminum-magnesium alloy AMr6 (AMg6) ($\sigma_B = 32 \text{ kg/mm}^2$, $\sigma_T = 16 \text{ kg/mm}^2$ and $\delta = 15\%$), and of thermally hardenable alloy AB (AV) having in quenched and artificially aged state (AVT1) $\sigma = 32 \text{ kg/mm}^2$, $\sigma_T = 21 \text{ kg/mm}^2$ and $\delta = 7\%$. Main attention was paid to tests with overlap-welds in flat, tubular, and angular bearing rods, joined to shaped sections by flange, or flange and front seams. Moreover, the shearing strength of flange joints was tested. The assemblies were made of 6 - 8 mm thick sheets, 48 x 38, 50 x 42 mm diameter tubes and corner sections 45 x 45 x 4 and 56 x 56 x 5 x 4 mm. They were joined

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ves the fact

On the strength of welded assemblies in...

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that the welding speed is also an index of the strength of press-formed parts made of cold-hardened, thermally non-hardenable, alloy AMg6. There are 3 figures and 2 tables.

ASSOCIATIONS: Promstal'konstruktsiya (Shneyderov and Rubanovich), TsNIISK (Khookharin)

Card 3/3

RUBANOVICH, L.L., inzh.; KHOKHARIN, A.Kh., kand.tekhn.nauk; SHNEYDEROV, R.G.,
inzh.

Strength of welded joints in elements made of the AMg6 aluminum
alloy. Prom. stroi. 40 no.7:50-56 '62. (MIRA 15:7)
(Aluminum alloys--Welding)

SHNEYDEROV, R.G., inzh.; RUBANOVICH, L.L., inzh.; KHOKHARIN, A.Kh., kand.
tekhn.nauk

Strength of welded assemblies of construction elements
in aluminum alloys. Svar. proizvod. no.12:9-11 D '62.

(MIRA 15:12)

1. Proyektnaya kontora Glavstal'konstruktsii Ministerstva
stroitel'stva predpriyatiy metallurgicheskoy i khimicheskoy
promyshlennosti SSSR (for Shneyderov, Rubanovich).

2. Tsentral'nyy nauchno-issledovatel'skiy institut
stroitel'nykh konstruktsiy Akademii stroitel'stva i
arkhitektury SSSR (for Khokharin).

(Aluminum, Structural—Welding)

RUBANOVICH, M. N.

23162 vliyaNiye poverkhnostnogo natyazheniya zhidkosti na gidravlicheskiye
soprotivleniya i strukturu techeniy gazozhidkostnoy smesi v trubakh.
Izvestiya akad. nauk SSSR, otd-niye Tekhn. nauk, 1949, No. 7,
c. 1085-93.-bibliogr: 9 Nazv.

SO: LETOPIS' NO. 31, 1949

RUBANOVICH, M. N.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Apparatus, Plant Equipment, and
Unit Operations

(2)

Effect of surface tension on the hydraulic resistance and the structure of the flow of gas-liquid mixtures in pipes.
B. I. Kosterin and M. N. Rubanovich. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1949, 1955-53. Water-air mixts. of various concns. were pumped through glass pipes at speeds varying from 0.05 to 3 m./sec. The surface tension of water was lowered in some cases by the addn. of iso-AmOH. As long as no stable foam was formed, changing the surface tension by as much as a factor of 3 had no effect either on the hydraulic resistance of air-water mixts. or on the nature of the laminar flow through the pipe. Lowering the surface tension increased the degree of dispersion of air in water and caused more foaming. When soap was added, stable foams were formed; and in these cases there was an appreciable increase in the hydraulic resistance of the system, viz., by a factor of 1.5-3, depending on the soap concn. and the ratio of air to water. The effects of such increases in hydraulic resistance were discussed as they applied to the circulation of water in boilers and heating systems.

Arild J. Miller

[Handwritten signature] 7/17/54

PA 52/49T39

ETRANOVICH, M. N.

USSR/Engineering
Steam Boilers

Jul 49

"Influence of Liquids' Surface Tension Upon Hydraulic Resistance and Flow Structure of a Gas-Liquid Mixture in Tubes," S. I. Kosterin, M. N. Rubanovich, Power Eng Inst Izvest G. M. Khrushchovskiy, Acad Sci USSR, 8 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 7

During movement of gas-liquid mixtures in tubes (16.5 mm diameter), decrease in liquid's surface tension does not influence amount of hydraulic losses under conditions of unstable foam-formation.

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USSR/Engineering (Contd)

Jul 49

over a wide range of liquid speed (0.05 - 3.5 m/sec). However, presence of surface-active and inactive substances in supply water of steam boilers may lead to intensive foam-formation not only in drums, but also in boiler tubes, which will cause an increase in hydraulic resistance and may lead to disruption of circulation. Submitted by Acad M. V. Kirpichev, 18 Apr 49.

52/49T39

YANITSKIY, G.; RUBANOVICH, N., inzhener-mekhanik (Omsk);
KORYAKOVITSEV, P.; YELISEYEV, G., inzhener (Ivanovo);
LIKHOVIDOV, I., frezerovshchik (Bratsk)

Suggested, achieved, introduced. Izobr. i rats. no.1:18.9
Ja '62. (MIRA 14:12)

1. Glavnyy inzhener Leningradskoy mebel'noy fabriki No.7 (for Koryakovtsev).
(Technological innovations)

RUBANOVICH, N.M.

New method of potato starch hydrolysis. Tekstil'. Prom. 12, No.9, 33 '52.
(CA 47 no.21:11780 '53) (MIRA 5:9)

RUBANOVICH, N. M.

Starch

New method for breaking down starch. Tekst. prom. 12, no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

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Dyeing with aniline black. N. M. RUBANOVICH and P. M. FOMIN. Russ. 27,372.
Jan. 1, 1931. The fiber is impregnated with solns. of salts of org. acids and metals used
generally as catalysts (V, Cu, Ni, etc.) or with complex compds. of these metals with
polyhydric, alcs., dried, treated with aniline and a chlorate without a catalyst, dried and
chromated.

ASS-5LA METALLURGICAL LITERATURE CLASSIFICATION

SOURCE: SIVILVA

SOURCE: BOWMAN

SOURCE: GOWD

RUBANOVICH, V.M.

Treatment of pruritic dermatoses by a block of the higher vegetative centers. Vest. dermat. i ven. no.2:41-44 '64. (MIRA 17:11)

1. Zaporozhskiy oblastnoy kozhno-venerologicheskoy dispensariy (glavnyy vrach K.V. Bocharnikov).

RUBANOVICH, V. M.

Treatment of some pruritic dermatoses with spasmolytine. Vest.
derm. i ven. no.6:25-28 '61. (MIRA 15:4)

1. Iz Zaporozhskogo oblastnogo kozhno-venerologicheskogo dispansera
(glavnyy vrach K. V. Bocharnikov).

(PRURITUS) (ADIPHENINE)

RUBANOVICH, Vladimir Yakovlevich; ISUPOV, Vladimir Semenovich;
PASHCHINSKAYA, G., red.; GUTMAN, A., tekhn. red.

Sovetsk. Kaliningrad, Kaliningradskoe knizhnoe izd-vo,
1961. 61 p. (MIRA 16:1)
(Sovetsk (Kaliningrad Province))

RUBANOVICH, I.A.

Pervyi god raboty sovetskogo metro. [First year of the operation of the Soviet subway]. (Sots. Transport, 1936, no.2, p. 25-35).

DLC: HE7.S6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

S/123/62/000/006/001/018
A004/A101

AUTHORS: Rubanovich, Ya. G.. Korol'kov, M. F.

TITLE: Plastics used in the manufacture of blades of rotors of pneumatic machines

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 6, 1962, 22. abstract 6A147 ("Gorn. Mashiny i avtomatika. Nauchno-tekhn. sb.", 1961, no. 3 (20), 127-129)

TEXT: The authors present the results of wear tests of blades of rotors of pneumatic machines manufactured from the following materials: textolite, textolite crumbs, fiber, asbestos-textolite, glass textolite, C B AM(SVAM) glass plastic, etc. The machine rotor rotation speed attained 5,000 rpm. Textolite and asbestos-textolite blades were additionally tested at 7,000 - 7,500 rpm. It was found that the wear of the asbestos-textolite blade edges is the least during friction on cast iron stators. At 7,000 - 7,500 rpm the wear of asbestos-textolite blades is by 3.5 times less than that of textolite blades. The cost price of such blades is by 35% lower. ✓

[Abstracter's note: Complete translation]

Card 1/1

TENENBAUM, Mikhail Mikhaylovich. Prinimali uchastiye: BEGAGOYEN, I.A., dotsent, kand.tekhn.nauk; RUBANOVICH, Ya.G., inzh. MARKIZ, Yu.L., otv.red.; ASTAKHOV, A.V., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Wear-resistance of parts and the durability of mining machines]
Iznosostoičnost' detalei i dolgovechnost' gornykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 245 p.
(MIRA 14:4)

1. Krivorozhskiy gornorudnyy institut (for Begagoyen). 2. Rukovoditel' gruppy Spetsial'nogo konstruktorskogo byuro leningradskogo zavoda "Pnevmatika" (for Rubanovich).
(Mining machinery) (Mechanical wear)